

RESEARCH IN ENGLISH LANGUAGE EDUCATION JOURNAL



Volume 4, Issue 1- June 2025 ISSN 3041-8909

The Effect of Digital Story Telling on Intermediate EFL Learners' English Reading Comprehension and Motivation

Aram Reza Sadeghi Beniss¹ & Masoumeh Gholami Chokalaee²

¹ Assistant Professor, English Language Department, Semnan University, Semnan, Iran.

Aramsadeghy@semnan.ac.ir

² Corresponding Author: M.A graduated, English Language Department, Semnan University, Semnan, Iran.

Masoumeh Gholami Chokalaee@gmail.com

ABSTRACT

Although a wealth of research has been conducted in the field of English language teaching, the studies related to the effects of digital story telling (DST) instruction as an innovative technique for language learning have been fairly insufficient. The present research made an effort to examine the effect of using DST on Iranian EFL learners' reading comprehension and their motivation. To address the study objectives, 40 female learners from Marefat Language Institute were recruited based on the results of an OPT as a standard test to homogenize. The participants (20 in each group) were randomly assigned into an experimental group and a control one. To measure learners' motivation, the Motivation Questionnaire by Dörnyei and Németh (2006) and Taguchi et al. (2009) was applied. The experimental group received DST instruction based on Robin's model (2008) and the control group received the conventional method designed by the institute. The analysis of the groups' performance in the pre-test and post-test through an independent samples t-tests revealed that the DST group significantly outperformed the control group in both reading comprehension and motivation. This study has several implications for language teachers and syllabus designers in the classroom context.

ARTICLE INFO:

Received: 2024-02-27 Reviewed: 2025-08-03 Accepted: 2025-08-03

Keywords:

digital storytelling, EFL learners, motivation, reading comprehension

1. Introduction

Due to the advent of technology, which has an impact on every part of our lives, the process of teaching and learning the second language (L2) has altered (Zhang, 2022). Mobile phones, tape recorders, digital cameras, and personal computers are just a few examples of the digital learning tools that have become widely accepted as essential

Citation: Sadeghi Beniss, A. & Gholami Chokalaee, M (2025). The effect of digital story telling on intermediate EFL learners' English reading comprehension and motivation. *Research in English Language Education Journal*, Vol4 (1), 151-166. DOI: 10.48310/jelt.2025.15886.1083



components of educational facilities due to the rapid advancement of technology (Pandya & Joshi, 2022). Students are producing, writing, and interacting in new ways in a period when digital media devices are readily accessible (Hafner, Chik, & Jones, 2015). The concept of new literacies is being incorporated into new definitions of what it means to be literate (Ware, 2017).

There is no precise definition of what the "New Literacies" are because change is one of its fundamental characteristics (Bishop & Counihan, 2018; Schlupp, 2016). Leu, Kinzer, Coiro, Castek and Henry (2017) conceptualized new literacies as "the skills, strategies, and dispositions required to successfully use and adapt to the rapidly changing information and communication technologies and context that continuously emerge in our world and influence all areas of our personal and professional lives" (p. 3). New literacies, in the words of Zoch and Myers (2017), are "evolving social practices that combine new digital means with old symbolic means to achieve basic motivational goals for engaging in literacy practices" (p. 33).

Through what Leu, et al. (2017) refer to as "New Literacies," DST encourages the development of 21st-century abilities that are essential for today's global and competitive job market. Ohler (2013) asserts that DST is now a popular new media activity. Additionally, according to Dreon, Kerper and Landis (2011), DST has impacted how students collaborate with one another and engage with one another, which influences the consequences of learning in the classroom context.

DST and its applications have been defined in a variety of ways by scholars. As described by Grant and Bolin (2016), DST integrates traditional storytelling with the use of contemporary digital features, such as images, videos, music, and narration, to involve students in the creation of authentic and beneficial knowledge to share ideas more successfully with an audience through a multisensory project. According to Reinders (2011), DST gives learners a new approach to problem-solving and critical thinking through group projects and interpersonal interactions that permit them to engage in numerous forms of self- and world-exploration.

It was suggested by Tsou, Wang, and Tzeng (2006) that teachers use DST in the classroom as it raises students' language proficiency. One of the main goals of the current study is to develop reading abilities using DST. Reading comprehension is one of the abilities that should be prioritized since it allows pupils to learn more on their own (Widowati & Kurniasih, 2018). The most effective technique to learn new information about various areas of concepts is through reading.

Reading is the most efficient way to gain new information about many aspects of ideas. As Ismail, Syahruzah, and Basuki (2017) states it, reading is one of the receptive skills which is essential to be mastered by the students because it can improve students' general language skills in English and it can improve students' English vocabulary. Thus, reading is a good way to get new ideas, information, and experiences to help the students enrich their insight in English language. However, reading can be a challenge for the students because it is an active process which requires a great deal of practice and skill (Obateru, 2021).

Another principal concern of the present research is motivation. Motivation has been extensively acknowledged by both teachers and investigators as one of the major factors that affect the success and rate of the second/foreign language learning (Dörnyei & Ryan 2015). In second/foreign (L2) motivation studies, the main stimulus originates from the social psychology since language learning of another community simply cannot be distinguished from the students' social preferences towards the speech

community in question. Different studies demonstrate that those learners who have higher motivation are more successful and effective in their learning (for instance, Dörnyei & Ushioda, 2021).

Due to the importance of DST, various studies have been conducted in this field in different fields of L2 or foreign language as well as speaking skill (Nair & Yunus, 2022; Yang, Chen, & Hung, 2022), listening skill (Tabieh, Al-Hileh, Abu Afifa, & Abuzagha, 2021), reading skill (Al-Shaye, 2021; Anggeraini, & Afifah, 2017); writing skill (Chiang, 2020) and so on. Despite extensive studies on the positive effects of DST, this means is still not widely used as an effective technique in Iran's educational context.

Furthermore, in the Iranian educational context, teachers almost use traditional methods in the process of language teaching and learning and most learners are demotivated. In addition, the research area of storytelling, especially the impact of DST on both reading comprehension and motivation is still left underexplored and more studies are required. Moreover, students' learning can be enhanced by making a digital story while students' attention is gained and kept as DST is merged into the classroom setting (Oyarzun, del Puy Carretero, Mujika, & Arrieta, 2010).

Research Question 1: Does using DST have any significant effect on Iranian intermediate EFL learners' reading comprehension performance?

Research Question 2: Does using DST have any significant effect on Iranian intermediate EFL learners' motivation?

2. Review of Literature

2.1 Definition of DST

Being a relatively new medium to convey messages and information, DST still stands in the shade of grey in terms of its definition and interpretations among the mass, generally and storyteller, specifically. There are assorted schools of thought that define DST in various ways. Nonetheless, all those perceptions and definitions on DST share a very common gist. Robin (2008) sees DST as a very old oral storytelling integrated with technology tools to narrate personal tales using multimedia elements and the storytellers' own voice. Another insight on DST says that it is an unconscious act of using new technological tools to satiate humans' need in narrating their story (Ohler, 2013).

DST is one of the most influential technology tools in foreign language learning classrooms (Zakaria, Yunus, Nazri, & Shah, 2016), which requires foreign language learners to push themselves for using multimedia applications to improve their literacy skills (Robin, 2008).

2.2 Reading Comprehension

Reading comprehension is seen as a fundamental and inseparable skill (Yurko & Protsenko, 2020). In this matter, there is no doubt that language learning takes precedence over the two main skills of listening and speaking, but we cannot ignore the fact that students without understanding the language can only learn a limited vocabulary.

2.3 Motivation

Motivation is an essential component not only of the teaching-learning process, but of all the actions human beings perform daily and throughout their lives. Briefly, motivation can be defined as a physical, psychological, or social need which motivates

the individual to reach or achieve his goal and fulfill his need and, finally, feel satisfied owing to achieving his aim. Dörnyei and Ushioda (2021) define this construct as "the process whereby goal-directed activity is instigated and sustained" (p. 4).

3. Theoretical Framework

The theoretical framework for this study, exploring the effect of DST on EFL learners' motivation and reading comprehension, integrates key theories from second language acquisition, reading comprehension, and educational technology to provide a robust conceptual foundation.

Motivation in language learning is framed through Dörnyei's L2 Motivational Self System (2009), which posits that learners' motivation is driven by their Ideal L2 Self (envisioning themselves as proficient English speakers), Ought-to L2 Self (external pressures to learn), and L2 Learning Experience (engagement with the learning environment). DST supports this framework by fostering a creative space where learners can visualize their ideal L2 self through storytelling, engage in meaningful learning experiences, and align their efforts with personal or societal goals.

Complementing this, Gardner's Socio-Educational Model (1985) highlights integrative motivation (the desire to connect with the English-speaking community) and instrumental motivation (learning for practical purposes, such as career advancement), both of which are enhanced through DST's culturally rich and skill-building activities. For reading comprehension, schema theory (Rumelhart, 1980) explains how learners process texts by activating prior knowledge (schemata), with DST facilitating this by combining text with visual and auditory elements to make abstract content more relatable and memorable. Similarly, the Interactive Model of Reading (Stanovich, 1980) integrates bottom-up processes (e.g., decoding vocabulary) and top-down processes (e.g., predicting meaning), both supported by DST's multimodal approach, which aids in vocabulary recognition and contextual understanding.

Finally, the role of DST as an educational technology is grounded in the Multiliteracies Theory which redefines literacy to include digital, visual, and cultural competencies, positioning DST as a tool for fostering multidimensional language skills.

Additionally, Mayer's Cognitive Theory of Multimedia Learning (2002) underscores that effective learning occurs when information is processed through dual visual and auditory channels, as DST does by integrating multimedia elements, reducing cognitive overload and enhancing retention. Together, these theories suggest that DST creates an engaging learning environment that boosts EFL learners' motivation by connecting with their personal goals, improves their reading skills through active thinking and interaction, and uses technology to support various literacy skills and effective learning.

4. Methods

4-1. Research Design

This study applied quantitative method of research. Causal study as a type of quantitative research was administered and results were analyzed by SPSS (version 25). Both descriptive (mean, standard deviation, maximum, minimum, etc.) and inferential statistics were considered.

4-2. Participants (or Sample)

To fulfil the main purpose of this study, forty out of sixty learners were selected non-randomly through Oxford Placement Test (OPT) at a private institute (Marefat) in Sari,

Mazandaran, Iran. Based on the placement test's rubric scale, intermediate EFL learners were selected.

The participants were all female, ranging 17 to 21 in age. The selected participants were divided into two groups as an experimental group (N= 20) and the control one (N = 20). The experimental group received DST instruction and the control group received the conventional instruction as instructed by the institute's educational authorities which, in turn, was guided by the Touchstone 2 teacher's book.

4-3. Data Collection Instruments

1. Oxford Placement Test (OPT)

An OPT test was given to participants to ensure their homogeneity in terms of language proficiency. The homogeneity test encompassed sixty questions in three basic sections such as reading, vocabulary and grammar. Each section involved 20 items.

2. Motivation Questionnaire

The second instrument of the present study was a motivation questionnaire (See Appendix B) which was adopted from Dörnyei and Németh (2006) and Taguchi, Magid and Papi (2009) in a compound format. This questionnaire involves 19 items in two main sections as items of ideal L2 self and ought-to L2 self and L2 learning experience items. The first section involved 13 items in a six-point Likert scale (1 = strongly disagree to 6 = strongly agree) and the second section involved 6 items in a six-point Likert scale (1 = Not at all to 6 = very much). It includes three parts in thirty items. In order to facilitate learners' comprehension, the items of the questionnaire were translated into Persian and consequently face validated by two experts in the field.

Cronbach's alpha was used to assess the reliability of the motivation questionnaire. To do so, the questionnaire was piloted with 15 participants with a similar profile to the target participants of the study. Cronbach's alpha for the questionnaire turned out to be .89, which is indicative of a sufficiently high reliability index for the questionnaire.

3. Reading Pre- and Post-tests

In order to gauge the participants' reading comprehension ability, the researchers used reading pre- and post-tests (See Appendix C). The pre- and post-reading comprehension tests were administered to all the participants. This instrument was a set of reading tests which was devised according to the content of the courses and was administered in both groups before and after the teaching course. The items of reading pre-test consisted of 19 items in 6 reading texts and the reading post-test involved 19 items in 4 reading texts. Both tests were researcher-made tests the content of each was taken from the same pool of texts to ensure a consistent level of difficulty in both tests and they were adapted to learners' proficiency level. The tests' format was multiple-choice item.

A pilot study was applied to assess the reliability coefficients of both tests. To this aim, fifteen EFL learners were chosen to participate in the pilot test. To assess the test reliability, Cronbach Alpha formula was used. Cronbach's alpha for pre- and post-tests turned out to be .81 and .84, respectively, which is indicative of a sufficiently high reliability index for the tests. Two experienced teachers were determined to comment on the tests' items. They gave feedback on each item and revised each test twice.

4-4. Data Collection Procedure

To do this research, the researchers had to follow several phases as follows.

In the first phase, the required participants were selected based on the standard proficiency test as OPT. This test was applied before selecting and grouping the participants. After administrating the test, 40 intermediate learners were selected and randomly divided into two main groups: The experimental group and the control one. The experimental group received DST instruction as the treatments and the control group received the conventional method without DST instruction. Further, the reading pre-test was administered to all participants in order to determine the selected participants' level in language proficiency as well as their reading comprehension ability. The motivation questionnaire as a pre-test was also given to the students at the beginning to compare the results with what comes at the end of instructions.

In the treatment section, firstly, the teacher determined a student for making a group for learners in an online application (i.e., WhatsApp). Afterwards, the selected student added other classmates and the teacher into a group. In each session, the teacher determined a story and the leader sent the text to the group from Touchstone 2 (McCarthy, McCarten, & Sandiford, 2013). Story sessions were conducted as follows. Each story session was about seventy-five minutes long. The researcher used Robin's model (2008) in ten phases: 1. The purpose of the story; 2. The narrator's point of view; 3. A Dramatic question or questions; 4. The choice of content; 5. Clarity of voice; 6. Pacing of the narrative; 7. Use of a meaningful audio soundtrack; 8. Quality of the images, Video, and other multimedia elements; 9. Economy of the story detail, and 10. Good grammar and language usage.

The first phase was the overall purpose of the story. This element was to create a DST. Basically, it showed that a DST should have a rudimentary substance or a topic that will hold the contents of the story true from beginning to the end.

The second phase was the point of view of the narrator. Had the overall purpose of the story been established, the narrator's mindset helps to focus the story on the purpose and topic selected. By concentrating on the objective, it facilitated accomplishing the goals intended by the DST, and once those goals were met, the essence of the story was conveyed.

Third phase in this model was a dramatic question. Dramatic question was the phase to have the audience engaged in the story. A meaningful question was raised somewhere in the storyline and resolved at the end to build engagement and impact on the DST.

The fourth and the eighth phases are closely related since both talk about the atmosphere of DST. The fourth phase recommends that content of DST must be selected carefully to mirror the different tones of scenes in DST. The fifth phase demanded that the voice of the narrator had to be clear and audible to the audience from the beginning to the end of the story.

Furthermore, the sixth phase also addressed the use of voice in DST, emphasizing that adjusting vocal tones to align with the story's moods enhances audience engagement and deepens their immersion in the narrative.

The seventh phase in Robin's model, the use of meaningful soundtrack. This phase also stressed on the appropriate use of music to stimulate emotion with the combination of visual information which allowed audience to be more immersed in the story.

As for the eighth phase, it advocates similar action but tailors towards the use of proper image to reflect the precise tones in the DST. Both phases also indicate that the content and imagery are not required to be literal; rather, symbolic representation is acceptable.

The ninth phase was the economy of the DST. Economy in DST was all about using the right amount of material such as image, video, text, and music. It also emphasized on the length of the DST. DST did not need to be excessively lengthy. Instead, it had to be short and sweet with the right impact on the storyline.

Finally, the last phase by Robin is the usage of good grammar and language. This specific phase emphasizes the importance of remaining faithful to the core identity and origins of the digital storyteller. It said that the narrative had to reflect any dialect used because the dialect of the story established the style and character of the story as long as it is clear and truthful to the specific dialect.

The control group received the conventional method. In this group, the teacher posed one question in order to warm up learners and the learners tried to answer the question. Next, the teacher read the text and asked several questions about the new words of the text. Furthermore, the learners attempted to guess the meaning of the words and if they could not guess the meaning, they tried to find the meaning of the words from an Oxford monolingual dictionary. At the end of each paragraph, the two students were selected to say what happened in the paragraph. In the next stage, all learners summarized the text. At last, the learners answered the reading comprehension questions with the cooperation of their teacher. In the last phase, the English motivation questionnaire as the post-test and reading comprehension post-test were administered to all participants. In addition, a semi-structured interview was applied as a qualitative section of this research.

4-5. Data Analysis

The study employed SPSS software (version 25) to process and analyze the collected data. Both descriptive statistics (including measures such as mean, standard deviation, minimum, and maximum) and inferential statistical methods were applied.

To evaluate the potential significant impact of DST on the reading comprehension skills of Iranian EFL learners, independent samples t-tests were conducted. Similarly, independent samples t-tests were utilized to assess the significant effects of DST on the motivation levels of these learners.

In order to analyze the learners' attitudes towards DST, a content analysis was applied. To perform the content analysis, the researcher collected the content through the interview. Afterwards, the researcher read their answers and found the themes. In addition, she developed a set of rules for coding and coded the text according to the rules.

5. Results

5-1. Results of the First Research Question

The first research question tried to explore whether applying DST instruction has a significant effect on reading comprehension ability of Iranian intermediate EFL learners or not. In Table 1, the descriptive statistics of two groups in the reading pre-test are showed.

Table 1Descriptive Statistics of Reading Pre-test in the Two Groups

•	N	Mean	Std. Deviation	Std. Error Mean
DST group-Pre	20	10.60	1.31	.21
Control group-Pre	20	10.00	1.18	.18

According to the results of Table 1, the descriptive statistics (mean and standard deviation) of the reading pre-test scores in both groups were: the DST pre-test scores (X = 10.60, SD = 1.31), and the control pre-test scores (X = 10.00, SD = 1.18) which does not show a significant difference between the two groups. Table 2 presents an independent-samples t-test to indicate the difference between the two groups in the reading pre-test scores.

Table 2, indicates the result of independent samples t-test of the two groups (DST and control groups) in reading pre-test. The p value (.110) in the sig (2-tailed) is higher than .05, therefore, it can be said that there is no statistically significant difference between the performance of DST and control groups of this study in reading comprehension pre-test.

 Table 2

 Independent samples t-test of Reading Pre-test between the Two Groups

	Tes Equa	ene's t for ality of ances			t-test	for Equality of Means			
	F	Sig.	t	df	Sig. (2- tailed)	Mean Difference	Std. Error Difference	Confi Interva	% dence al of the rence
								Lower	Upper
Equal variances assumed	.021	.107	.231	38	.110	600	.403	-1.211	1.493
Equal variances not			.231	37.905	.110	600	.403	-1.211	1.493
assumed									

To see whether the difference between the mean scores of the two groups is statistically significant and meaningful in post-tests, an independent-samples t-test was conducted on the scores of learners in their reading post-test. Table 3 presents the reading post-test between two groups.

 Table 3

 Descriptive Statistics of Reading Post-test in the Two Groups

	N	Mean	Std. Deviation	Std. Error Mean
DST group-Post	20	15.50	1.49	.22
Control group-Post	20	12.00	1.28	.20

According to Table 3, the descriptive statistics (mean and standard deviation) of the reading post-test scores in both groups were: The DST post-test scores (X = 15.50,

SD = 1.49), and the control post-test scores (X = 12.00, SD = 1.28). Table 4 presents an independent-samples t-test to indicate the difference between the two groups in the reading post-test scores. The results of the Table 4, demonstrate the independent samples t-test of the two groups (DST and control groups) in the reading post-test.

 Table 4

 Independent samples t-test of Reading Post-test between the Two Groups

		Tes Equa	ene's t for llity of ances	•	t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2- tailed)	Mean Difference	Std. Error Difference	Confi Interva Diffe	dence of the rence	
									Lower	Upper	
	Equal variances assumed	.018	.001	.240	38	.000	-2.500	.210	-1.105	1.763	
test	Equal variances not assumed			.240	37.820	.000	-2.500	.210	-1.105	1.763	

The p value (.000) in the sig (2-tailed) is lower than .05, therefore, it can be said that there is a statistically significant difference between the DST and control groups performances in the reading post-test.

Therefore, it can be concluded that the DST instruction had a significant effect on reading comprehension ability of the intermediate EFL learners, and accordingly, the first null hypothesis is rejected.

5-2. Results of the Second Research Question

The second question investigates whether using DST instruction has a significant effect on Iranian intermediate EFL learners' motivation or not. Here, the descriptive statistics of the learners' performance in both groups in motivation are showed in Table 5.

 Table 5

 Descriptive Statistics of Motivation Pre-test in the Two Groups

	N	Mean	Std. Deviation	Std. Error Mean
DST group-Pre	20	73.00	2.56	.25
Control group-Pre	20	75.00	2.78	.24

The results of the Table 5 illustrate the descriptive statistics (mean and standard deviation) of the motivation questionnaire with DST pre-test scores (X = 73.00, SD = 2.56), and the control pre-test scores (X = 75.00, SD = 2.78). Table 6 presents an independent-samples t-test to indicate the difference between the two groups in the motivation pre-test scores.

Table 6 reveals the result of independent samples t-test of the two groups (DST and control groups) in motivation pre-test.

 Table 6

 Independent samples t-test of Motivation Pre-test between the Two Groups

<u></u>		Leve Tes Equ	ene's t for ality of ances					ality of Means		
		F	Sig.	t	df	Sig. (2- tailed)	Mean Difference	Std. Error Difference	95% Con Interval Differe	of the ence
	Equal variances assumed	.031	.199	.261	38	.198	-2.000	.241	-1.890	2.023
Pre_test				- .261	37.248	.198	-2.000	.241	-1.890	2.023

The p value (.198) in the sig (2-tailed) is higher than .05, therefore, it can be said that there was no statistically significant difference between the performance of DST and control groups of this study in the motivation pre-test.

To see whether the difference between the mean scores of the two groups is statistically significant in post-tests, an independent-samples t-test was conducted on the scores of learners in their motivation post-test. Table 7 presents the motivation post-test between two groups.

Table 7Descriptive Statistics of Motivation Post-test in the Two Groups

	N	Mean	Std. Deviation	Std. Error Mean
DST group-Post	20	96.00	3.01	.25
Control group-Post	20	82.00	2.88	.21

Based on the results of the Table 7, the descriptive statistics (mean and standard deviation) of the motivation post-test scores in both groups are: The DST post-test scores (X = 96.00, SD = 3.01), and the control post-test scores (X = 82.00, SD = 2.88). In Table 8, an independent-samples t-test was run to indicate the difference between the two groups in the motivation post-test scores.

Table 8	
Independent samples t-test of Motivation Post-test between the Two Groups	ĭ

Independ	dent sample:	s t-tes	st of .	Moti	vation	Post-te	est between	the Two G	roups	
		Lev	ene's			t-te	est for Equa	lity of Means		
		Tes	t for							
		Equ	ality							
		(of							
		Vari	ances							
		F	Sig.	t	df	Sig.	Mean	Std. Error	95% Con:	fidence
						(2-	Difference	Difference	Interval	of the
						tailed)		_	Differe	ence
									Lower	Upper
	Equal	.039	.001	-	38	.000	-14.000	.236	-1.617	2.366
	variances			.563						
Post_test	assumed									
	Equal			-	36.961	.000	-14.000	.236	-1.617	2.366
	variances			.563						
	not assumed									

In Table 8, the results of independent samples t-test of the two groups (DST and control groups) in the motivation post-test are presented. The p value (.000) in the sig (2-tailed) is lower than .05, thus, it can be stated that there is a statistically significant difference between the performance of DST and control groups in the motivation post-test scores.

Accordingly, the results reveal that there is a significant difference between the DST and control groups' post-test scores in the motivation construct. In this regard, it can be concluded that the DST instruction had a significant effect on motivation of intermediate EFL learners, and accordingly, the second null hypothesis is also rejected.

6. Discussion

In the present section, it is essential to interpret and compare the results of the current investigation to the previous academic studies. Over the past few decades, media have received a great deal of attention in educational research (Chan, Chin, Nagami, & Suthiwan, 2011). Based on the importance of media, this study examined the impact of the DST on Iranian EFL learners' reading comprehension and motivation.

The results of the first research question justified the considerable growth of the experimental group's mean score on the reading post-test. In other words, the results demonstrated that DST instruction had a significant effect on Iranian EFL learners' reading comprehension. The results are consistent with several previous studies (Alkhlili; 2018; Al-Shaye, 2021; Bakyt, 2021; Hamdy, 2017; Lim, Zakaria, & Aryadoust, 2022). Hamdy (2017) found that learners who used DST in their classrooms in presentation, their reading comprehension ability improved. The results contributed to the understanding of the advantages of technology-based experiences, showing that these experiences could improve students' reading comprehension ability during the incorporation of technology in education. In another study, Al-Shaye (2021) examined the impact of using DST on developing critical reading skills, critical thinking skills, and self-regulated learning skills. He found that the critical reading skills, critical thinking skills, and self-regulated skills improved significantly in comparison to the control group. In addition, Lim, Zakaria, and Aryadoust (2022) maintained that applying DST can be effective for language learners to comprehend the new information.

The second research question investigates whether using DST instruction has a significant effect on Iranian intermediate EFL learners' motivation or not. The results revealed that there was a statistically significant difference between the performance of DST and control groups in the motivation post-test scores. In this regard, the results of this study are congruent with the results of the previous studies. Regarding the views of Abderrahim and Navarro González (2020), the research provides evidence that learners who are extrinsically motivated are more likely to be motivated intrinsically using DST. Furthermore, Hava (2019) concluded that DST is considered as an effective means to enhance learners' motivation, since learners can comprehend the text easier. Contrary to the above studies, which indicate the effectiveness of DST on increasing motivation, the result of the study by Adara, and Haqiyyah (2020) showed that the use of DST cannot always be an effective tool in increasing learners' motivation. One of the possible reasons may be students' lack of familiarity or lack of interest in the topic of DST.

7. Conclusion

The principal purpose of this study was to explore the impact of applying DST on Iranian EFL learners' reading comprehension and motivation. The findings showed that DST could be an effective means for language teachers to both boost EFL learners' reading comprehension and motivation. It can be concluded that digital technology in classrooms appears to enhance student motivation to acquire a foreign language. Therefore, it seems that students have a better idea about storytelling and in this way they might learn better.

Another major inference that can be drawn from the findings is that DST tasks help learners make a connection between the meaning of words and a meaningful sentence. Put it another way; by listening to the stories, learners are better able to remember the words because they can connect the new words to the sequences of events of the story. Moreover, EFL learners exhibited both positive and negative attitudes toward incorporating DST in language learning, which contributed to a deeper understanding of its advantages and limitations. The results of this study can have implications for the curriculum designers to include DST as a major technique in the learning materials so that reading comprehension can be facilitated and students see other varied means of learning.

Besides, this study has implications for the teachers in a way that they can use DST to make their students motivated and encourage them to learn DST can be incorporated into the classroom to introduce variety, fostering an engaging and enjoyable learning environment that motivates students to actively participate. Finally, DST can be introduced to the learners as a self-study technique to improve their reading comprehension.

Acknowledgments

We would like to thank the M.A professors for their valuable support and contributions to this study. Any opinions, findings, and conclusions expressed in this article are those of the authors and do not necessarily reflect the views of the funding organization.

Conflict of Interest

The authors declare that there is no conflict of interest regarding the publication of this paper.

References

- Abderrahim, L., & Navarro González, D. (2020). The impact of digital storytelling on the motivation and engagement of young foreign language learners. In M. R. Freiermuth & N. Zarrinabadi (Eds.), *Technology and the psychology of second language learners and users* (pp. 451–468). Palgrave Macmillan. https://doi.org/10.1007/978-3-030-34212-8_20
- Adara, R. A., & Haqiyyah, A. (2020). The effects of integrating digital storytelling to students' motivation. *Edukasi: Jurnal Pendidikan dan Pengajaran*, 7(2), 131–145. DOI:10.19109/ejpp. v7i2.6023
- Alkhlili, M. (2018). Using digital stories for developing reading skills of EFL preparatory school pupils. *Multi-Knowledge Electronic Comprehensive Journal for Education and Science Publications (MECSJ)*, 57(1), 68–88. https://www.mecsj.com/ar/uplode/images/photo/all_paper_ISSUE_(4).pdf#page=5
- Al-Shaye, S. (2021). Digital storytelling for improving critical reading skills, critical thinking skills, and self-regulated learning skills. *Kıbrıslı Eğitim Bilimleri Dergisi*, 16(4), 2049–2069. https://doi.org/10.18844/cjes.v16i4.6074
- Anggeraini, Y., & Afifah, N. (2017). Digital storytelling as a teaching medium in reading classroom. *Language Circle: Journal of Language and Literature*, 12(1), 83–90. https://doi.org/10.15294/lc.v12i1.11472
- Bakyt, N. (2021). *Digital storytelling in EFL teaching in Kazakhstan* [Unpublished master's thesis]. Suleyman Demirel University.
- Bishop, R., & Counihan, E. (2018). Beyond the page: New literacies in the twenty-first century. *Voices from the Middle*, 25(4), 39–44. https://publicationsncte.org/content/journals/10.58680/vm201829628?crawler=true
- Chan, W. M., Chin, K. N., Nagami, M., & Suthiwan, T. (2011). *Media in foreign language teaching and learning* (Vol. 5). Walter de Gruyter.
- Chiang, M.-H. (2020). Exploring the effects of digital storytelling: A case study of adult L2 writers in Taiwan. *IAFOR Journal of Education*, 8(1), 65–82. https://doi.org/10.22492/ije.8.1.04
- Dörnyei, Z. (2009). The L2 motivational self-system. *Motivation, language identity and the L2 self*, 36(3), 9-11.
- Dörnyei, Z., & Németh, N. (2006). *Motivation, language attitudes and globalisation: A Hungarian perspective* (Vol. 18). Multilingual Matters. https://www.multilingualmatters.com
- Dörnyei, Z., & Ryan, S. (2015). *The psychology of the language learner revisited*. Routledge. https://doi.org/10.4324/9781315779553
- Dörnyei, Z., & Ushioda, E. (2021). *Teaching and researching motivation* (3rd ed.). Routledge/Taylor & Francis Group. https://doi.org/10.4324/9781351006743
- Dreon, O., Kerper, R. M., & Landis, J. (2011). Digital storytelling: A tool for teaching and learning in the YouTube generation. *Middle School Journal*, 42(1), 4–10. https://doi.org/10.1080/00940771.2011.11461777
- Gardner, R. C. (1985). Social psychology and second language learning: The role of attitudes and motivation. Edward Arnold Publishers.
- Grant, N. S., & Bolin, B. L. (2016). Digital storytelling: A method for engaging students and increasing cultural competency. *Journal of Effective Teaching*, *16*(1), 44–61. https://files.eric.ed.gov/fulltext/EJ1125812.pdf

- Hafner, C. A., Chik, A., & Jones, R. (2015). Digital literacies and language learning. *Language Learning & Technology*, 19(3), 1–7. http://llt.msu.edu/issues/october2015/commentary
- Hamdy, M. F. (2017). The effect of using digital storytelling on students' reading comprehension and listening comprehension. *Journal of English and Arabic Language Teaching*, 8(2), 112–123.
- https://ejournal.uin-suska.ac.id/index.php/jealt
- Hava, K. (2021). Exploring the role of digital storytelling in student motivation and satisfaction in EFL education. *Computer Assisted Language Learning*, 34(7), 958–978. https://doi.org/10.1080/09588221.2019.1650071
- Ismail, H., Syahruzah, J. K., & Basuki, B. (2017). Improving the students' reading skill through translation method. *Journal of English Education*, 2(2), 124–131. https://doi.org/10.31327/jee.v2i2.405
- Leu, D. J., Kinzer, C. K., Coiro, J., Castek, J., & Henry, L. A. (2017). New literacies: A dual-level theory of the changing nature of literacy, instruction, and assessment. *Journal of Education*, 197(2), 1–18. https://doi.org/10.1177/002205741719700202
- Lim, N. Z. L., Zakaria, A., & Aryadoust, V. (2022). A systematic review of digital storytelling in language learning in adolescents and adults. *Education and Information Technologies*, 27(5), 6125–6155. https://doi.org/10.1007/s10639-021-10861-0
- Mayer, R. E. (2002). Multimedia learning. In *Psychology of learning and motivation* (Vol. 41, pp. 85–139). Academic Press. https://doi.org/10.1016/S0079-7421(02)80005-6
- McCarthy, M., McCarten, J., & Sandiford, H. (2013). Viewpoint Level 2 Student's Book. Cambridge University Press.
- Nair, V., & Yunus, M. (2022). Using digital storytelling to improve pupils' speaking skills in the age of COVID 19. *Sustainability*, 14(15), 9215. https://doi.org/10.3390/su14159215
- Obateru, O. T. (2021). Improving pupils' reading ability in English language: How can self-esteem help? *UNIZIK Journal of Educational Research and Policy Studies*, 2, 166–174. https://www.unijerps.org/index.php/unijerps/article/view/27/23
- Ohler, J. B. (2013). Digital storytelling in the classroom: New media pathways to literacy, learning, and creativity. Corwin Press.
- Oyarzun, D., del Puy Carretero, M., Mujika, A., & Arrieta, A. (2010). Establishing communication channels for digital storytelling applications. In *Interactive Storytelling: Third Joint Conference on Interactive Digital Storytelling, ICIDS 2010, Edinburgh, UK, November 1-3, 2010.*
- Pandya, U., & Joshi, P. (2022). Integration of technology in English language teaching. In *International Seminar Commemorating the 100th Anniversary of Tamansiswa*.
- Reinders, H. (2011). Digital storytelling in the foreign language classroom. *ELT World Online*, *3*(1), 1–9.
- Robin, B. R. (2008). Digital storytelling: A powerful technology tool for the 21st century classroom. *Theory into Practice*, 47(3), 220–228.
- Rumelhart, D. E. (1980). Schemata: The building blocks of cognition. In R. J. Spiro, B. C. Bruce, & W. F. Brewer (Eds.), *Theoretical issues in reading comprehension*. Erlbaum.

- Schlupp, A. M. (2016). The effect of new literacies and technology on student engagement and transforming the literacy block [Doctoral dissertation]. Rowan University.
- Stanovich, K. E. (1980). Toward an interactive-compensatory model of individual differences in the development of reading fluency. *Reading Research Quarterly*, 16(1), 32–71. https://ila.onlinelibrary.wiley.com/journal/19362714
- Tabieh, A. A., Al-Hileh, M. M., Abu Afifa, H. M., & Abuzagha, H. Y. (2021). The effect of using digital storytelling on developing active listening and creative thinking skills. *European Journal of Educational Research*, 10(1), 13–21. https://doi.org/10.12973/eu-jer.10.1.13
- Taguchi, T., Magid, M., & Papi, M. (2009). Iranian Learners of English: A Comparative Study. *Motivation, language identity and the L2 self*, 36, 66.
- Tsou, W., Wang, W., & Tzeng, Y. (2006). Applying a multimedia storytelling website in foreign language learning. *Computers & Education*, 47(1), 17–28. https://doi.org/10.1016/j.compedu.2004.08.013
- Wang, A. Y. (2016). The impact of digital storytelling on the development of TPACK among student teachers in Taiwan. In *The handbook of technological pedagogical content knowledge (TPACK) for educators* (pp. 297–308). Routledge.
- Ware, P. (2017). Technology, new literacies, and language learners. In *The handbook of technology and second language teaching and learning* (pp. 265–277). Wiley. https://doi.org/10.1002/9781118914069.ch18
- Widowati, D. R., & Kurniasih, K. (2018). Critical reading skill and its implication to speaking ability in multicultural classroom. *Celtic: A Journal of Culture, English Language Teaching, Literature and Linguistics*, 5(2), 18–23. https://doi.org/10.22219/celtic.v5i2.7615
- Yang, Y.-T. C., Chen, Y.-C., & Hung, H.-T. (2022). Digital storytelling as an interdisciplinary project to improve students' English speaking and creative thinking. *Computer Assisted Language Learning*, 35(4), 840–862. https://doi.org/10.1080/09588221.2020.1750431
- Yurko, N., & Protsenko, U. (2020). Reading comprehension: The significance, features and strategies. *Publishing House «European Scientific Platform»*, 6(1), 106–114. https://doi.org/10.36074/rodmmrfssn.ed-1.10
- Zakaria, S. M., Yunus, M. M., Nazri, N. M., & Shah, P. M. (2016). Students' experience of using Storybird in writing ESL narrative text. *Creative Education*, 7(15), 2107–2120. https://doi.org/10.4236/ce.2016.715210
- Zhang, Z. (2022). Learner engagement and language learning: A narrative inquiry of a successful language learner. *The Language Learning Journal*, 50(3), 378–392. https://doi.org/10.1080/09571736.2020.1786712
- Zoch, M., & Myers, J. (2017). Teachers' engagement with new literacies as support for implementing technology in the English/language arts classroom. *Contemporary Issues in Technology and Teacher Education*, 17(1), 25–52. https://www.learntechlib.org/p/151010/

166

Digital Storytelling in EFL Reading ComprehensionAram Reza Sadeghi Beniss & Masoumeh Gholami Chokalaee